



Stressing factors in nurses who work in the sector of urgency and emergency

Fatores estressores em enfermeiros que atuam no setor de urgência e emergência

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Keywords— Stress; Nursing; Urgency and emergency.

Abstract— Currently, stress is considered one of the main health problems that has been gaining importance, due to the proportion of its impact on people's lives. The objective of the research was to verify the main stress factors among nurses in the urgency and emergency sector and their influence on nursing care. Methodology: qualitative-quantitative, descriptive, cross-sectional field research, whose sample consisted of 30 nurses. For data collection, a form prepared by the researchers was used, containing questions about sociodemographic and occupational characteristics of nurses, open questions to verify the influence of stress on nursing care, and to investigate the main stressors in nurses, an instrument was used. adapted from the "Nurses Stress Inventory". Results: the research revealed that situations that generate stress are mainly associated with the lack of human resources (90%) and materials (80%), both pointed out by nurses as being often or always stressful factors. These factors and the work overload combined with the professional's unpreparedness are recognized by most nurses as a negative influence on work and on the care provided to the patient. Conclusion: the results indicate that nurses working in the urgency and emergency sector are exposed to stressful situations that can compromise the care provided to the client. The identification of these stressors is essential for the development of strategies that alleviate the stressors, providing better working conditions, humanization and safety in health care.

Resumo— Atualmente, o estresse é considerado um dos principais problemas de saúde que vem ganhando importância, devido à proporção de seu impacto na vida das pessoas. O objetivo da pesquisa foi verificar os principais fatores de estresse entre enfermeiros (a) do setor de urgência e emergência e sua influência na assistência de enfermagem. **Metodologia**:

pesquisa de campo quali-quantitativa, descritiva, de caráter transversal, cuja amostra foi composta por 30 enfermeiros. Para coleta dos dados utilizou-se um formulário elaborado pelas pesquisadoras, contendo questões sobre características sociodemográficas e ocupacionais dos enfermeiros, questões abertas para verificar a influência do estresse na assistência de enfermagem, e para averiguar os principais fatores estressores em enfermeiros utilizou-se um instrumento adaptado do "Inventário de Estresse em Enfermeiros" (IEE). Resultados: a pesquisa revelou que as situações geradoras de estresse estão associadas principalmente a falta de recursos humanos (90%) e falta de materiais (80%) ambas, apontadas pelos enfermeiros como sendo fatores muitas vezes ou sempre estressores. Sendo esses fatores e a sobre carga de trabalho aliado ao despreparo do profissional reconhecidos, por maior parte dos enfermeiros como influência negativa no labor e na assistência prestada ao paciente. Conclusão: os resultados indicam que os enfermeiros que atuam no setor de urgência e emergência estão expostos a situações estressoras, que podem comprometer a assistência prestada ao cliente. Sendo a identificação destes fatores estressores essencial para que se possa desenvolver estratégias para amenizar os agentes estressores, proporcionando melhores condições de trabalho, humanização e segurança na assistência em saúde.

Palavras-chave— *Estresse, Enfermagem, Urgência e emergência.*

I. INTRODUCTION

Currently, stress is considered one of the main health problems which has been gaining importance due to the proportion of its impact on the lives of people. According to the World Health Organization (WHO), stress it affects 90% of the world population (OLIVEIRA et al., 2018).

For the International Labor Organization (ILO) occupational stress they are effects that occur in the worker's body and can cause damage your health (OLIVEIRA et al., 2018). According to Silva and Batista (2017), stress in addition to harming health, it negatively influences the lives of those who work with health. The Health Education Authority ranks nursing in fourth place among the most stressful professions in the public sector (VALERETTO; ALVES, 2014).

Among the various stressors exposed by nursing professionals who work in the hospital environment, it is possible to mention: the interpersonal relationship and multi-professional; acting in urgent and emergency situations; deficiency of material and human resources, resulting in an overload of work. the variables that promote the development of occupational stress, which can jeopardize the safety of patients who depend on these professionals (MUNHOZ et al., 2018). Urgent and emergency nursing has advanced significantly in recent years for being a specialty of great relevance and for the number high number of accidents and urban violence that often culminate with people in critical condition and at risk of death. From this perspective, it is understood that in the hospital institution the urgency and emergency sector is a factor triggering the existence of stress in nurses (SANTOS et al., 2018).

According to Andrioli, et al. (2018), the stress on professionals working in the Emergency Room (ER) is very common, as they are the first to welcome patients upon arrival at the hospital. These professionals are faced

daily with difficult situations such as those involving decision-making and quick service. Knowing that the urgency and emergency sector is characterized by the number of patients at high risk of death, where the professional is faced with unpredictable circumstances, exhausting work hours, family demands and agility in a short time to provide excellent assistance (FREITAS, et al., 2015). And that stressed professionals can have serious consequences for themselves and for the people they care for (OLIVEIRA; CUNHA, 2014).

It is important to recognize stressors in the work environment and their consequences in the health-disease process, in order to seek solutions to alleviate and address them, preventing damage to workers' health, in order to provide safe care to its users. Thus, this study aims to characterize nurses (a) who work in urgency and emergency; verify the main factors that generate stress in these nurses and verify whether stress influences nursing care.

II. MATERIAL AND METHODS

It is a qualitative-quantitative, descriptive, field research of character cross section. Held between January and March 2019. The universe population were nurses working in the Urgency and Emergency sector of a public hospital in Cacoal/RO.

The inclusion criteria were: being nurses who work in the aforementioned sector, with more than 1 year of professional experience and who accepted participate in the survey. Thus, it was decided to exclude the nurses from vacation or away for any reason (medical certificate and maternity leave) in the period of the survey, as well as those unable to respond to the survey. Thus, the sample consisted of 30 professional nurses.

For data collection, a form prepared by the researchers was used, containing questions on sociodemographic and

occupational characteristics, 03 open questions were inserted to verify the influence of stress on customer care, and to investigate the main stressors in nurses - used an instrument adapted from the "Nurses Stress Inventory", which allows investigating the main stressors and their frequency in the nurses' work activities (STACCIARINI; TRÓCCOLI, 2000).

From that instrument, 26 items were selected for this research, subdivided into three categories (Interpersonal Relationships, Career Stressful Roles and Intrinsic Work Factors), whose answers range from 1 to 5, that is, (1) never, (2) rarely, (3) sometimes, (4) many times, (5) always.

After authorization from the Research Ethics Committee (CEP) of the Faculty of Biomedical Sciences of Cacoal under Opinion No. 3,095,761, the chosen institution for the study, she was contacted to obtain authorization for the research and also collaboration to enable data collection. Then it was performed approach of nurses (a), where it was clarified about the research objectives, guaranteed confidentiality, anonymity of participants, and other conduct ethics provided for in Resolution 466/2012 of the National Health Council, which deals with of research involving human beings (BRASIL, 2012), and all participants signed the Informed Consent Form.

Data were tabulated and consolidated on a basis constituted in the program Word® and Excel® version 2013. The statistics used were descriptive using relative frequency and absolute frequency. The statistical analysis was structured in tables that best represent the results.

Regarding the open questions, data analysis was performed by reflective readings, followed by organization and interpretation of answers. In what refers to the data categorization phase, the information was analyzed according to Bardin's (2016) content analysis methodology. In order to guarantee the anonymity of the subjects they were identified with the letter "E", followed by the numeral cardinal indicating the temporality of the interviews.

III. RESULTS AND DISCUSSION

During the period of data collection, there was a sample loss of some subjects for not meeting the inclusion criteria. Thus, 30 nurses who work in the Urgency and Emergency sector participated in this study. The results showed a predominance of 63.3% females. The age group of nurses ranged from 23 to 59 years, with a higher concentration of 23 to 29 years 40%. It was observed in the study that the majority of nurses interviewed also

exercise the role of head of the family, as with regard to marital status, 63.3% of professional nurses claimed to be married. More than half of the population surveyed, 63.3% said they had children. As for data related to the work context, in relation to the professional category researched, 46.7% are nurses at the beginning of their career, that is, they have 1 to 5 years of professional experience, 50% said they have a single employment relationship with workload. 40 hours/week, and 66.7% work in both shifts, that is, day and night. As shown in table 1.

Table 1 – Sociodemographic and occupational characteristics of professional nurses working in the Urgency and Emergency sector of a public hospital in Cacoal/RO, 2019.

	DATA	N	%
SEXO	Male	11	36,7
	Female	19	63,3
AGE	23 - 29	12	40
RANGE	30 - 39	10	33,3
	40 - 49	5	16,7
	50 - 59	3	10
MARITAL STATUS	Single	8	26,7
	Married	19	63,3
	Divorced	3	10
SONS	Yes	19	63,3
	Not	11	36,7
BOND	1	15	50
LABOR	>1	15	50
CHARGE	40h/week	15	50
TIME	>40h/week	15	50
TIME	15 years	14	46,7
SERVICE	6 - 10 years	9	30
	11 - 15 years	3	10
	>15 years	4	13,3
SHIFT	Both	20	66,7
	Day only	10	33,3
	only night	0	0

Source: Prepared by the Authors (2019).

Table 2- Distribution of responses from nurses working in the Urgency and Emergency sector, according to the category – "Interpersonal relationships". Cacoal/RO, 2019.

Situations that can represent a source of tension or stress	Frequency of stressful situations					
	DATE		N		R/AVMV/S	
	N	%	N	%	N	%
Relationship with the medical team	2	(6,7)	8	(26,7)	8	(26,7)
Relationship with fellow nurses	3)	5	(16,7)	5	(16,7)
Provide care to critically ill patients	5	(16,7)	11	(36,6)	7)
The amount of work has made me tired	0	(0)	21	(70)	21	(70)
Take responsibility for the quality of service	2	(6,7)	16	(53,3)	16	(53,3)
that the institution provides	1	(3,3)	12	(40)	12	(40)
Serving family members of patients	0	(0)	20	(66,7)	20	(66,7)
Solve unforeseen events that happen on site	2	(6,7)	8	(26,7)	8	(26,7)
of work	0	(3,3)	21	(70)	21	(70)
Team work	1	(3,3)	8	(26,7)	8	(26,7)

Caption: (N) never (R) rarely / (AV) sometimes (MV) many times / (Y) Always

Source: Prepared by the Authors (2019).

It is verified, in this study, that there is a predominance of female nurses, married and with children, a result that is already expected since the nursing team, historically, is mostly female. According to a survey by the Federal Council of Nursing (COFEN) and FIOCRUZ conducted in 2015, 84.6% of nursing professionals were female and this trait has been present since the formation of the professional area (LOMBARDI; CAMPOS, 2018). Trettene et al. (2016), report that women, while working outside the home, manage their lives as mothers and wives, worry about their children and home care, developing multiple activities that can be interpreted as stressors. Study carried out by Santos et al. (2018), with nurses working in urgency and emergency units, observed

that there was a significant number above the average of stress in nurses who were married and who had children. Thus, it is inferred that women, to this day, are the majority in the exercise of the profession, and that the fact of being married and having children can be aggravating to stress, considering that the individual's concerns increase, especially in relation to the responsibilities inherent to the family.

Regarding the variables age group and length of service, it was noted in the studied sample that 40% of professionals are between 23 and 29 years old, that is, they are young adults and 46.7% with less than 6 years of service. Studies carried out on Burnout Syndrome state that the prevalence of Burnout is higher in younger nurses, with little experience and who work with highly complex patients, since inexperienced, they end up becoming more tense in the face of complications that may arise during their shift. Especially for those under 30 years of age (VASCONCELOS; MARTINO; FRANÇA, 2018; FRANÇA et al., 2013). Regarding the number of jobs and weekly working hours, it was found that there were no differences. However, it is worth mentioning that nurses who have a double employment relationship are more subject to stress due to having a double work shift, often without the necessary break between them. This situation generates physical wear and tear, as well as social harm to the worker (OLIVEIRA; CUNHA, 2014). Other research showed that sleep deficit reduces cognitive and task performance capacity, exposing professionals and clients to accidents and failures (LIMA et al., 2013). This condition suggests that nurses with multiple employment relationships are exposed to a higher probability of developing stress. It can significantly interfere in the quality of life of these professionals.

It is also noted that most nurses work in both shifts, that is, they spend 24 hours at the workplace, which can be a contributing factor to occupational stress. Because according to Sena et al. (2018), nursing workers who spend 24 hours in the work environment are susceptible to changes in their quality of life, especially night shift workers. Since, there is greater psychophysiological wear, as they carry out their activities at a time when the body's functioning is reduced. Thus, causing decreased alertness, low performance, irritability, stress, bad mood, depression, among others. Inoue et al. (2013) report that night work causes higher levels of stress and worse sleep quality. For Vidotti et al. (2018), shift work is associated with several changes in biological functions, which lead to physical and mental health problems. To investigate the main stressors that nurses may be exposed to, the following categories were evaluated: Interpersonal Relationships, Career Stressful Roles and Intrinsic Work Factors.

In the category of interpersonal relationships, the items, serving a large number of people (70%), amount of work has made me tired (70%) and solving unforeseen events that happen in the workplace (66.7%), were the main factors generators of stress in these nurses, because according to them, these functions often or always leave them stressed. Still, regarding the nurses' responses to the stressors mentioned above, 30%, 30% and 33.3% respectively, stated that these factors rarely and sometimes cause stress, that is, for all nurses these factors represent a source of stress. As shown in table 2.

It is observed that the unforeseen events that happen in the workplace, the high demand for care and the work overload are conditions that can generate physical and mental exhaustion for nurses.

According to Santos et al. (2019)

The workload in emergency rooms exposes nursing professionals to occupational stress, as the difficulties found in the emergency sector, whatever the reason, can directly reflect on nursing care and care, and especially on their health.

The authors also mention that this work overload is a result of the high demand of patients, the inadequate number of professionals in the sector, the amount of service per person.

In the study by Miorin et al. (2018), participants reported that work overload is tiring and inhumane, for both the worker and the client, since work overload leads to physical and emotional exhaustion. In this sense, nursing professionals are forced to perform their activities mechanically, without time to evaluate the activities developed and thus compromising patient care.

Among the occupational stressors pointed out by nurses in the category of stressful roles in the career, there is the restriction of professional autonomy (50%), working in inadequate facilities (70%) and unhealthy environment (53.3%), all mentioned as many sometimes or always cause stress. Other factors were pointed out as rarely and sometimes causing stress. As shown in table 3.

Table 3- Distribution of responses from nurses working in the Urgency and Emergency sector, according to the category – “Career stressors roles”.

Cacoal/RO, 2019.

Situations that can represent source of tension or stress	Frequency of stressful situations		
DATE	N	R/AV	MV/S
Working with unprepared people	1 (3,3)	16 (53.3)	13 (43,4)
Working in a competitive climate	7 (23,3)	17 (56,7)	6 (20)
Working in an unhealthy environment	2 (6,7)	12 (40)	16 (53,3)
Restriction of professional autonomy	1 (3,3)	14 (46,7)	15 (50)
work on premises	2 (6,7)	7 (23,3)	21 (70)
inadequate physical	0 (0)	22 (73,5)	8 (26,7)
Have a short deadline to fulfill orders	1 (3,3)	17 (56,7)	12 (40)
Feeling powerless in the face of the tasks to be performed	1 (3,3)	18 (60)	11 (36,7)

	N	%	N	%	N	%
Working with unprepared people	1 (3,3)	16 (53.3)	13 (43,4)			
Working in a competitive climate	7 (23,3)	17 (56,7)	6 (20)			
Working in an unhealthy environment	2 (6,7)	12 (40)	16 (53,3)			
Restriction of professional autonomy	1 (3,3)	14 (46,7)	15 (50)			
work on premises	2 (6,7)	7 (23,3)	21 (70)			
inadequate physical	0 (0)	22 (73,5)	8 (26,7)			
Have a short deadline to fulfill orders	1 (3,3)	17 (56,7)	12 (40)			
Feeling powerless in the face of the tasks to be performed	1 (3,3)	18 (60)	11 (36,7)			

Caption: (N) never (R) rarely (AV) sometimes (MV) many times (Y) Always

Source: Prepared by the Authors (2019).

It was observed in this study that the urgency and emergency sector have conditions that contribute to occupational stress, and that such conditions pointed out by nurses can increase their vulnerability in relation to the agents that cause stress.

In the study by Trettene et al. (2016), the restriction of professional autonomy was also identified as a factor that predisposes nurses to stress. According to the authors, nurses recognize the difficulties related to leadership and work organization. The condition of articulating the individual, relational and organizational dimensions, necessary for the exercise of leadership, makes its practice complex, which elucidates the difficulty faced in the daily work of nursing. With regard to inadequate facilities and unhealthy environment. Melo et al. (2013), suggest that nurses become more vulnerable to stress in an inadequate physical environment, which may compromise their performance in the exercise of their functions.

According to RATOCHINSKI et al. (2016), working in inadequate, unhealthy and unsafe conditions directly influences the professional's physical and psychological well-being.

Table 4 presents the intrinsic factors of work. In this category, most nurses mention all items as being often or always situations causing stress, with emphasis on the lack of human resources (90%), lack of material needed for work (80%) and making physical effort to fulfill the job (63.3%), since 100% of respondents mentioned the three items as a stressor at work.

Table 4- Distribution of responses from nurses working in the Urgency and Emergency sector, according to the category – “Intrinsic factors to work”. Cacoal/RO, 2019.

Situations that can represent a source of tension or stress	Frequency of stressful situations					
	DATE	N	R/AV	MV/S		
	N	%	N	%	N	%
Develop activities beyond my Occupational role	2	(6,7)	6	(20)	22	(73,3)
Lack of material needed for the job	0	(0)	6	(20)	24	(80)
lack of human resources	0	(0)	3	(10)	27	(90)
Feeling emotional exhaustion with work	1	(3,3)	12	(40)	17	(56,7)
Answer for more than one role in this job	2	(6,7)	11	(36,6)	17	(56,7)
Run different tasks simultaneously	2	(6,7)	11	(36,6)	17	(56,7)
Make physical effort to do the job.	0	(0)	11	(36,7)	19	(63,3)
Administer or supervise the work of other people	1	(3,3)	14	(46,7)	15	(50)

Caption: (N) never (R) rarely (AV) sometimes (MV) many times (Y) Always

Source: Prepared by the Authors (2019).

It is notorious in the percentage distribution that for most nurses, situations related to intrinsic work factors cause higher levels of stress, that is, often or always represented a source of tension or stress in these professionals.

According to Trettene et al. (2016), the scarcity of human resources, the inadequate staffing is directly related to the overload of activities that compromise the quality of care and patient safety, generating psychological changes, demotivation and consequently occupational stress.

Still, specific aspects of nursing work in the urgent and emergency scenario require the nursing team to develop activities that require physical effort, and which, added to the inadequacy of human resources, compromise the quality of nursing care.

The lack of materials was also pointed out by all nurses as a source of tension or stress. According to Azevedo et al. (2018), the lack of materials in sufficient quantity and quality for adequate care, as well as the unpredictability of these resources and equipment make it difficult to plan nursing actions, expose patients at risk and generate family dissatisfaction.

The analysis of the subjects' speeches led to the categorization of two thematic units: Main stressors harmful to patients and Influence of stress on patient care.

Category I – Main stressors harmful to patients.

It can be seen in this category that during their work activities, nurses are faced with various stressful situations. However, some stressful situations are pointed out in a notorious and more incisive way.

Reports evidencing these situations are described below:

[...] lack of HR, lack of adequate structure, lack of material, lack of professional competence, lack of professional training, poor quality service, brutishness with the patient, decreased desire to serve the patient well (E10).

[...] the lack of HR increases the number of tasks for professionals, increasing stress, fatigue and making better patient care impossible (E1).

[...] professionals not trained for an urgency and emergency sector, lack of materials, lack of HR that ends up overloading the professional (E8).

[...] All of them can lead to adverse events and/or death. (E33)

It is a set, as all the stressors contribute to form a tired, unmotivated and indifferent professional to the patient [...]. (E16)

The statements show that the most stressful aspect of work activities is the professionals' lack of preparation, the lack of human and material resources, which leads to a

workload and emotional exhaustion, which can impair the quality of care provided to the patient. According to (SILVA; ROSA, 2016), Brazilian health institutions have been facing a lack of health planning, low quality of human resources, problems with equipment and failures in the physical structure.

For Rodrigues et al. (2017), the work environment with precarious working conditions and excessive workload are factors that contribute to stress. According to Santos et al. (2019), the urgency and emergency sectors present situations that expose professionals to suffering and work overload. The high demand for care exceeding the capacity of the hospital institution is one of the generators of difficulties for the nursing team, resulting in precarious care in the emergency sector. The authors report that the shortage of professionals causes an accumulation of tasks, which will cause anxiety and a feeling of impotence in professionals.

Thus, emergencies are sectors that must be prepared quantitatively and qualitatively to receive the high demand for care and provide adequate care to patients.

Category II – Influence of stress on patient care.

Regarding the influence of stress on customer care, it is noted that nurses perceive stress as a detrimental factor to nursing care, that is, it directly influences the care provided to the customer. As shown in the testimonials always associated with a negative connotation.

[...] The emotional directly interferes in care, especially in patients with a greater degree of dependence on the nursing team (E16).

[...] today a lot is said about patient safety. But how to ensure patient safety with a team stressed due to work overload, lack of HR, and often lack of adequate materials, so stress negatively reflects on patient safety, as physical and mental exhaustion affect performance, mainly in emergencies (E3).

[...] A stressed person cannot provide good care to the patient, cannot perform their functions with the same efficiency, will not be able to work as a team (E11).

[...] Feels more tired, less attentive, with greater irritability, works automatically, being prone to mistakes (E16).

[...] the patient indirectly receives the stress, because we are in a bad mood (E21).

[...] It is possible errors in the activity due to physical and mental fatigue: changing medication and behavior. Stress between professional and companion (E13).

[...] Risks to adverse events (E25).

It was noted in the statements that occupational stress has a direct influence on the safety culture. According to the World Health Organization (WHO), safety is the reduction of the risk of unnecessary damage to an acceptable minimum, considered a constant component and closely related to patient care. (SILVA; ROSA, 2016).

Occupational stress is considered one of the factors that most affects nursing professionals and, consequently, influences the performance of the team in the provision of health services, generating insecurity in the provision of care (MUNHOZ et al., 2018).

Rodrigues et al. (2017), report that a disorganized work environment, added to the deficient improvement of human resources, exposes the nursing staff to stress and fatigue, in addition to the lack of motivation of professionals who perform care, which can result in situations of insecurity for patients.

Nursing exposure to stressors increases physical, psychological and emotional burdens. Physical loads are found in the form of tiredness, aches and pains. In the realm of the psychic and emotional, feelings of anxiety, impotence, exhaustion, stress, suffering, among others, are found. Thus, these feelings can be passed on to patients, influencing their treatment, can generate more dissatisfaction and suffering on the part of nursing professionals and, thus, make them experience feelings of professional emptiness, feeling of incapacity and dislike for work (SANTOS et al., 2019).

It is important to emphasize that effective care directly influences the patient's prognosis, for this it is necessary to have material and human resources quantitatively and qualitatively in accordance with the recommended, in addition to appropriate facilities, technological and infrastructure resources that meet the needs, even if minimally, for allowing the necessary care in a timely manner (TRETTENE et al., 2016).

IV. FINAL CONSIDERATIONS

The results indicate that professional nurses working in urgent and emergency care are exposed to various stressful situations. It was found that for most nurses, all items represent a source of stress at work that can negatively influence patient care, with an emphasis on work overload, lack of human and material resources. That is, the working conditions experienced by nurses favor stress, and expose

them to greater vulnerability to the development of unsafe care. Thus, the incorporation of a culture of safety in the work environment is a fundamental strategy when one hopes to alleviate stressors, providing better working conditions and excellent health care.

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